EAST - [default.wsp:1]

File View Edit Tools Window Help

Active
- L1: (1) 10/640086
- L2: (37) 369/30.25
- L3: (45) 369/30.26
- L4: (214) 369/30.04
- L5: (552) 369/47.15
- L6: (199) 369/47.23
- L7: (193) 369/59.2
- L8: (46702) G11B007/00
- L9: (9942) G11B021/08
- L10: (62364) G11B020/10
- L11: (783) G11B020/24

DBs USPAT

Default operator: OR

Plurals

Highlight all hit terms initially

BRS form | IS&R form | Image | Text | HTML

	Type	L #	Hits	Search Text	DBs	Time Stam	Comment	Error Definit	Er
1	BRS	L1	1	10/640086	US-P GPUB	2007/05/1 4 13:56			
2	BRS	L2	37	369/30.25	US-P GPUB	2007/05/1 4 13:56			
3	BRS	L3	45	369/30.26	US-P GPUB	2007/05/1 4 13:57			
4	BRS	L4	214	369/30.04	US-P GPUB	2007/05/1 4 13:57			
5	BRS	L5	552	369/47.15	US-P GPUB	2007/05/1 4 13:57			
6	BRS	L6	199	369/47.23	US-P GPUB	2007/05/1 4 13:57			
7	BRS	L7	193	369/59.2	US-P GPUB	2007/05/1 4 13:57			
8	BRS	L8	46702	G11B007/00	US-P GPUB	2007/05/1 4 13:57			
9	BRS	L9	9942	G11B021/08	US-P GPUB	2007/05/1 4 13:58			
10	BRS	L10	62364	G11B020/10	US-P GPUB	2007/05/1 4 13:58			
11	BRS	L11	783	G11B020/24	US-P GPUB	2007/05/1 4 13:58			

Hits | Details | HTML

Ready

BIWEEKLY EXAMINER TIME AND ACTIVITY REPORT

GAU: 2627 PP: 2007-15 ENDING: 04/28/07

EXAMINER: PSITOS, ARISTOTELIS M GRADE GS-15 GRADE DT 08/16/87 STEP 10 STEP DT 09/27/98 NUMBER OF EFFECTIVE QSI 0

EMPLOYEE NUMBER: 61211 POSITION FACTOR 1.40 PP EXPECTANCY(GS-12) 23.6 PP EXPECTANCY(GS-15) 16.9

CORRECTION	APPL NUMBER	ACTION NUMBER	TRANSACTION TYPE	CLASS/SUBCLASS	DATE OF ABANDONMENT

TIME	PP	QTR	FYR
LEAVE	4.0	9.0	123.0
EXCUSED ABSENCE	0.0	0.0	0.0
HOLIDAY	0.0	0.0	64.0
OTHER	5.0	6.0	58.0
DETAIL	0.0	0.0	0.0
NON-ASSIGN	0.0	0.0	0.0
REGULAR EXM HRS	73.0	149.0	857.0
OVERTIME EXM HRS	0.0	0.0	0.0
TOTAL EXM HRS	73.0	149.0	857.0

FIRST ACTIONS			
ELECT/RESTRICTS	0	0	11
REJECT(INC FNL)	2	5	51
ALLOWANCES	1	2	10
OTHER	0	0	2
TOTAL 1ST ACTIONS	3	7	74
TOTAL FAOM	4	9	73
FULL PCT SEARCH	0	0	0
HALF PCT SEARCH	0	0	0
TOTAL FAOM&PCT	4.0	9.0	73.0

SUMMARY ACTIONS	PP	QTR	FYR
ADVISORY ACTIONS	2	4	17
QUAYLES	1	2	4
INTERFERENCES	0	0	0
FINAL REJECTIONS	4	8	43
EXAMINER'S ANSWER	0	0	0
ALLOWANCES	5	9	33
ABANDONMENTS	2	5	33
IPERS	0	0	0
DISPOSALS	7	13	64
TOTAL DIS PCT IPER	7	13	64
ALLOW.AFT EXM ANS	0	0	0
ABAND.AFT EXM ANS	0	0	0
TOTAL ACTIONS	18	37	208

STATISTICAL ANALYSIS	PP	QTR	FYR
PERCENT OF EXPECTANCY	127	124	135
PERCENT OF EXPECTANCY QSI EQUIV.	127	124	135
PERCENT NEW OF TOTAL ACTIONS	17	19	36
PERCENT ALLOWED OF DISPOSALS	71	69	52
PERCENT REG EXAM HOURS	89	91	78
EXPECTANCY (GS-12)	23.6	23.6	23.6
HOURS PER P.U. USING FAOM/PCT	13.3	13.5	12.5
HOURS PER FAOM/PCT	18.3	16.6	11.7
PRODUCTION UNITS USING FAOM/PCT	5.5	11.0	68.5
EXPECTED PRODUCTION UNITS	4.3	8.8	50.8
HOURS PER DISPOSAL/IPER	10.4	11.5	13.4
ACTIONS PER DISPOSAL/IPER	2.6	2.8	3.3

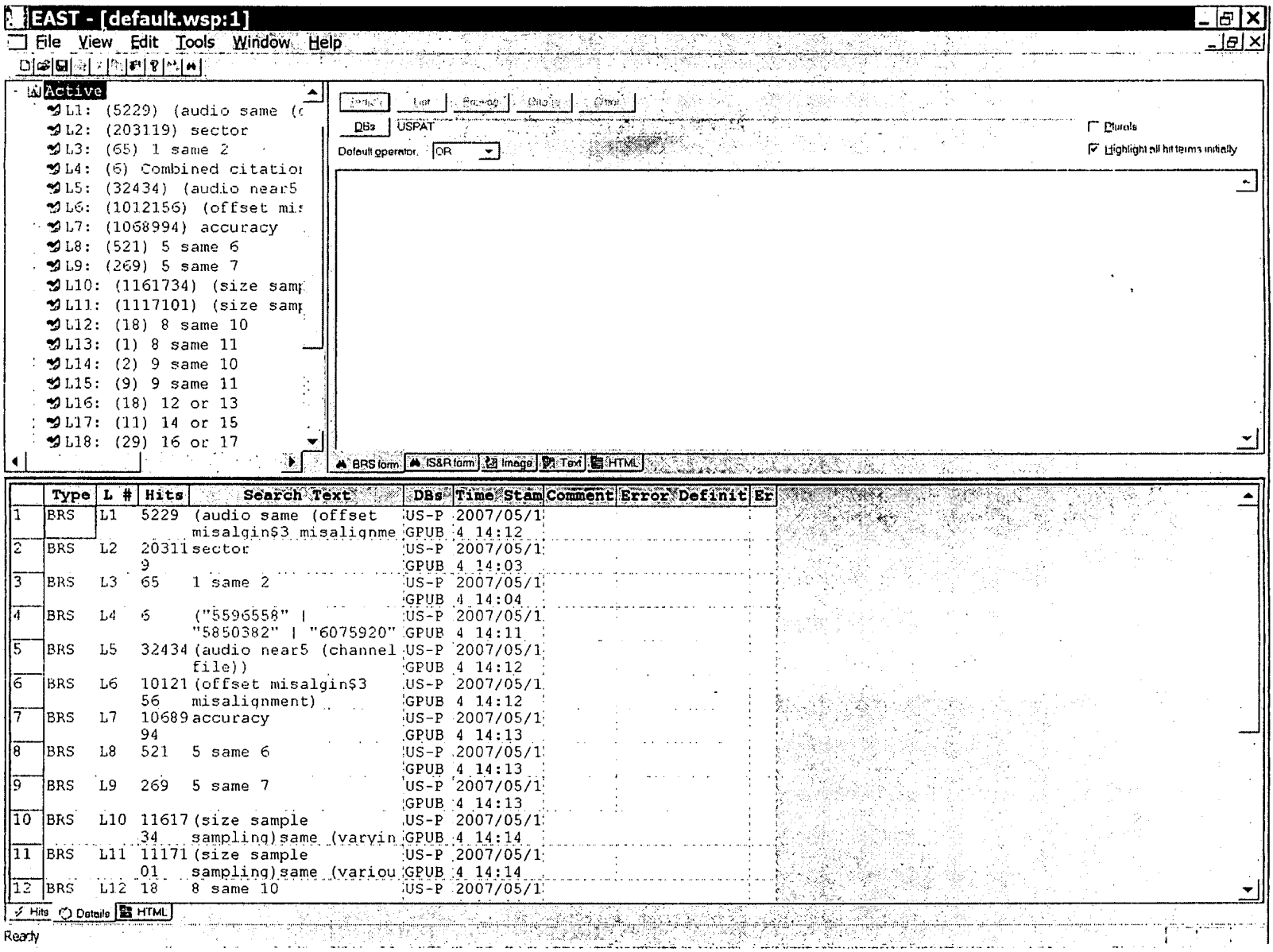
50.8 / 3 = 15.24

50.80 + 15.24 → 66.04

*** CHANGE MADE IN ONE OR MORE OF THE FOLLOWING CATEGORIES: TIME;POSITION FACTOR;PP EXPECTANCY;NUMBER OF EFFECTIVE QSI IN PP14

	PP14	PP15	QTR1	QTR2	QTR3	QTR4	FYR
WORKFLOW ADDITIONS	0.0	0.0	1.0	1.2	0.0	0.0	2.2
WORKFLOW SUBTRACTIONS	0.0	0.0	0.0	2.0	0.0	0.0	2.0

	PP14	PP15	QTR1	QTR2	QTR3	QTR4	FYR
CUSTOMER SERVICE ADDITIONS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CUSTOMER SERVICE SUBTRACTIONS	0.0	0.0	0.0	0.0	0.0	0.0	0.0



	Type	L #	Hits	Search Text	DBs	Time Stam	Comment	Error	Definit	Er
1	BRS	L1	5229	(audio same (offset misalgin$3 misalignme	US-P GPUB	2007/05/1 4 14:12				
2	BRS	L2	203119	sector	US-P GPUB	2007/05/1 4 14:03				
3	BRS	L3	65	1 same 2	US-P GPUB	2007/05/1 4 14:04				
4	BRS	L4	6	("5596558" | "5850382" | "6075920"	US-P GPUB	2007/05/1 4 14:11				
5	BRS	L5	32434	(audio near5 (channel file))	US-P GPUB	2007/05/1 4 14:12				
6	BRS	L6	1012156	(offset misalgin$3 misalignment)	US-P GPUB	2007/05/1 4 14:12				
7	BRS	L7	1068994	accuracy	US-P GPUB	2007/05/1 4 14:13				
8	BRS	L8	521	5 same 6	US-P GPUB	2007/05/1 4 14:13				
9	BRS	L9	269	5 same 7	US-P GPUB	2007/05/1 4 14:13				
10	BRS	L10	1161734	(size sample sampling) same (varyin	US-P GPUB	2007/05/1 4 14:14				
11	BRS	L11	1117101	(size sample sampling) same (variou	US-P GPUB	2007/05/1 4 14:14				
12	BRS	L12	18	8 same 10	US-P	2007/05/1				

INFORMATION RECORDING MEDIUM AND RECORDING/REPRODUCING APPARATUS COMPATIBLE WITH COPY PROTECTION

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a Continuation Application of PCT Application No. PCT/JP00/02153, filed Apr. 3, 2000, which was not published under PCT Article 21(2) in English.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention pertains to an information recording medium capable of recording and reproducing information and a recording/reproducing apparatus therefor.

2. Description of the Related Art

More particularly, the present invention relates to a physical format of an information recording medium and a recording/reproducing apparatus compatible with copy protection.

A DVD (digital versatile disk) capable of recording/reproducing operation has been developed. These disks each include recordable DVD (hereinafter, referred to as a DVD-R) and re-recordable DVD (hereinafter, referred to as a DVD-RW). These information recording media each are capable of recording a large amount of video data, audio data, and computer data. Thus, it is discussed that media identification information for protecting illegal copy is recorded in advance in these information recording media.

A book type identification code and group wobble detection that are recorded in these media are available for use in identification between DVD-ROM and DVD-R and identification between DVD-ROM and DVD-RW. In addition to these items of identification information, it is discussed that still another item of media identification information is utilized for encode key information for encoding and recording contents.

It is discussed that the media identification information is used in combination with two items of identification information, and a recording mode for an information recording medium as well is recorded in a different form. In any case, such identification information must be formed in such a way that the information cannot be rewritten or changed on the information recording media.

When these items of identification information are defined as identification information A and identification information B, the identification information A is recorded as NBCA (Non-Burst Cutting Area) information in a DVD-RW. The identification information B is not defined yet.

In the present invention, the identification information A is obtained as individual identification information on a disk itself, and a disk serial number or the like is recorded by cutting. The identification information B is at least disk license information, for example, information on copy disabling, enabling of one copy, or enabling of two copies.

In a rewritable DVD (DVD-RAM), the identification information A is recorded as BCA (Burst Cutting Area) information. The identification information B can be recorded as emboss information in a specific area.

With respect to a DVD-R disk, the identification information A and the identification information B are not defined yet.

Jpn. Pat. Appln. KOKAI Publication No. 11-86436 describes a judgment system for, when information is reproduced from a digital information recording medium capable of recording operation such as a DVD-RAM, comparing information sampled and read from electronic transparency information with information recorded on a recording medium, thereby judging whether or not such information is original. However, this document fails to mention how this system is specifically achieved on a DVD-R or DVD-RW disk.

Jpn. Pat. Appln. KOKAI Publication No. 11-355711 describes a multiple signal for preventing duplication, it fails to mention the disposition of identification information on the medium.

Jpn. Pat. Appln. KOKAI Publication No. 10-105975 describes BCA (Burst Cutting Area) recording, it fails to mention the other identification information.

Jpn. Pat. Appln. KOKAI Publication No. 10-105974 describes BCA recording, it fails to mention the other identification information.

As has been described above, although the identification information A is recorded as NBCA information in the above DVD-RW, the identification information B is not defined yet. In addition, with respect to the DVD-R disk, the identification information A and the identification information B are not defined yet.

It is an object of the present invention to provide an information recording medium and method and a recording/reproducing apparatus that correspond to copy protection making it possible to use DVD-RW identification information B, DVD-R identification information A, and identification information B.

BRIEF SUMMARY OF THE INVENTION

In an information recording medium of the present invention, the identification information B itself is recorded in a DVD-R and a DVD-RW in emboss so that a user cannot rewrite the information, and a copy of the identification information B cannot be duplicated or changed on the information recording medium by the recording/reproducing apparatus, thereby prevent illegal use of the identification information B. In addition, in an additional description type recording medium such as a DVD-R, the identification information B may be recorded in a pre-recorded manner instead of emboss.

In addition, in the method and apparatus of the present invention, as described above, a specific fixed value (for example, all zeros) is automatically inserted into such another disk management area so that the identification information B emboss- or pre-recorded in a specific area cannot be copied, thereby preventing illegal use of identification information.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

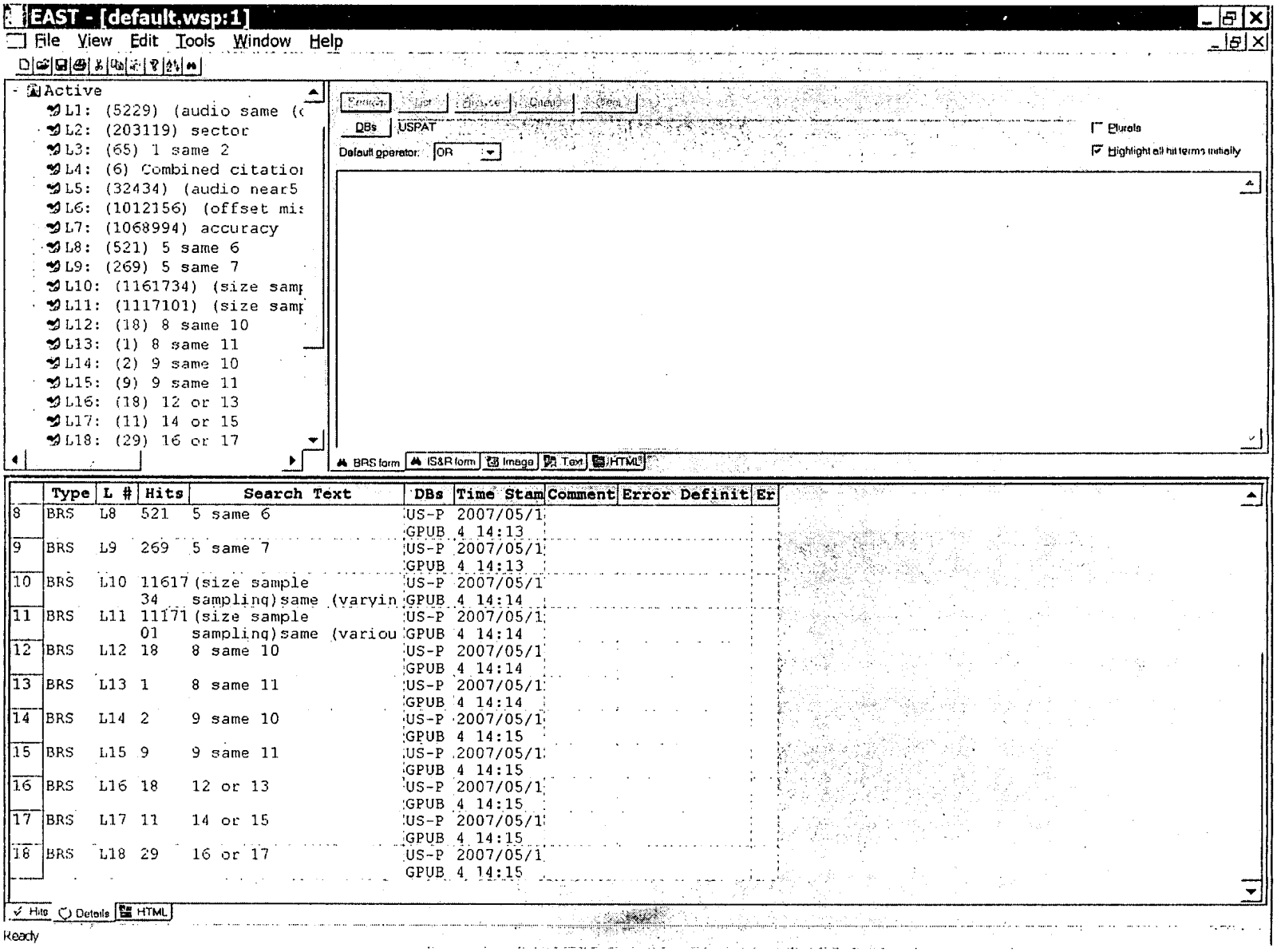
FIG. **1** is an illustrative view illustrating a lead-in data structure of a DVD-R according to the present invention;

FIGS. **2**A to **2**D are illustrative views each illustrating a data structure of a buffer area shown in FIG. **1**;

FIGS. **3**A and **3**B are illustrative views each illustrating a data structure of a border zone formed in a data area shown in FIG. **1**;

FIG. **4** is an illustrative view illustrating a relationship between a disk and a lead-in and border zone;

FIG. **5** is an illustrative view illustrating another example of data contents of disk information according to the present invention;



	Type	L #	Hits	Search Text	DBs	Time Stam	Comment	Error Definit	Er
8	BRS	L8	521	5 same 6	US-P GPUB	2007/05/1 4 14:13			
9	BRS	L9	269	5 same 7	US-P GPUB	2007/05/1 4 14:13			
10	BRS	L10	11617 34	(size sample sampling)same (varyin	US-P GPUB	2007/05/1 4 14:14			
11	BRS	L11	11171 01	(size sample sampling)same (variou	US-P GPUB	2007/05/1 4 14:14			
12	BRS	L12	18	8 same 10	US-P GPUB	2007/05/1 4 14:14			
13	BRS	L13	1	8 same 11	US-P GPUB	2007/05/1 4 14:14			
14	BRS	L14	2	9 same 10	US-P GPUB	2007/05/1 4 14:15			
15	BRS	L15	9	9 same 11	US-P GPUB	2007/05/1 4 14:15			
16	BRS	L16	18	12 or 13	US-P GPUB	2007/05/1 4 14:15			
17	BRS	L17	11	14 or 15	US-P GPUB	2007/05/1 4 14:15			
18	BRS	L18	29	16 or 17	US-P GPUB	2007/05/1 4 14:15			